

previously undescribed. The larva nearly resembles that of *A. hamamelis* (*inclara* Sm.); indeed from the mature larva alone no constant differences can be pointed out, but Dr. Dyar has observed certain differences in the earlier stages of these larvæ which will be more fully worked out at the next opportunity. In this connection he also presented a list of *Apatela* by Prof. A. R. Grote, with generic and subgeneric types, which had been prepared by Professor Grote on request, and which is supplemental to the monograph of the genus recently published by Smith and Dyar. Dr. Dyar stated that he was pleased with Professor Grote's erection of a subgenus for *A. funeralis*, since this was definable on larval characters, as are all the other subgenera of *Apatela*, except *Tricholonche* as compared with *Lepitoreuma*.

LIST OF NORTH AMERICAN APATELA.

By A. RADCLIFFE GROTE, A. M.

In this list I have arranged the species following Dr. Dyar's recent groupings of the larva, except that I retain the subgeneric names *Tricholonche* and *Lepitoreuma* as distinct. The latter was described by me in 1873 with the type *ovata*; founded upon the shape of the primaries, the contents of this group have been always homogeneous in my writings and the type and title must be retained. The neuration of the type of *Apatela* does not differ essentially from that of the type of *Agrotis*. Species of which the larvæ are known are marked with an asterisk (*).

Gen. APATELA Hübn. 1806.

Typ. *A. aceris*.Subgen. *Apatela* Hübn.= *Acronicta* Ochs. 1816.Typ. *A. leporina*.= *Megacronycta* Grote 1873.Typ. *A. americana*.* *americana* Harris.*aceris* A. and S.*acericola* Guen.*hastutifera* Guen. et Walk.*obscura* Hy. Edw.* *rubricoma* Guenée.* *hastulifera* Abb. and Sm.*hesperida* J. B. Sm.

- * dactylina Grote.
- felina Grote.
- * frigida J. B. Sm.
- felina* French.
- pacifica J. B. Sm.
- insita Walker.
- canadensis J. B. Sm.
- cretata J. B. Sm.
- * leporina Linné.
- vulpina* Grote.
- sancta* Hy. Edw.
- lepusculina Guenée.
- * populi Riley.
- cinderella J. B. Sm.
- transversata J. B. Sm.
- tota Grote.

Subgen. *Hyboma* Hübn. 1816.

Typ. A. strigosa.

= *Triaena* Hübn. 1816.

Typ. A. psi.

= *Microcælia* Guen. 1852.

Typ. A. fragilis.

- * innotata Guenée.
- var. *graefi* Grote.¹
- * betulæ Riley.
- * tritona Hübn.
- * grisea Walker.
- pudorata* Morr.
- revellata J. B. Sm.
- * occidentalis G. and R.
- psi* Guen.
- laetifica J. B. Sm.
- * lobeliæ Guenée.
- * furcifera Guenée.
- hasta Guenée.
- ? *telum* Guen.
- manitoba J. B. Sm.
- thoracica Grote.
- strigulata J. B. Sm.
- quadrata Grote.
- * radcliffei Harvey.
- * morula G. and R.
- spinigera Guenée.
- harveyana* Grote.
- * pruni Harris.
- clarescens* Grote.

¹ See Riley, Bull. Ent. Soc. Brk. VIII, 3, 1884.

- * *superans* Guenée.
- * *brumosa* Guenée.
 - impleta* Walk.
 - sübochrea* Grote.
- * *lithospila* Grote.
- * *vinnula* Grote.
 - paupercula* Grote.
- * *falcula* Grote.
 - parallela* Grote.
- * *fragilis* Guenée.¹
 - spectans* Walk.
 - minella* Dyar.
 - mansueta* J. B. Sm.
- * *connecta* Grote.
 - Subgen. *Jocheaera* Hübn. 1816.
 - Typ. A. *alni*.
- * *funeralis* G. and R.²
 - Subgen. *Tricholonche* Grote 1896.
 - Typ. A. *afflicta*.
- * *afflicta* Grote.
 - persuasa* Harvey.
 - liturata* J. B. Sm.
 - marmorata* J. B. Sm.
 - Subgen. *Lepitoreuma* Grote 1873.
 - Typ. A. *ovata*.
- * *ovata* Grote.
- * *hamamelis* Guenée.
 - incretta* Morrison.
- * *clarescens* Guenée.
 - haesitata* Grote.
- * *modica* Walker.
 - exilis* Grote.
- * *retardata* Walker.
 - dissecta* G. and R.
- alborufa* Grote.
 - Walkeri* Andr.
 - Subgen. *Pharetra* Hübn. 1816.
 - Typ. A. *auricomma*.
 - = *Philorgyia* Grote 1896.
 - Typ. A. *luteicomma*.
 - = *Arctomyscis* Hübn. 1816.
 - Typ. A. *euphorbiæ*.
 - = *Eulonche* Grote 1873.
 - Typ. A. *oblinita*.

¹The original reference of *Microcalia fragilis* Guen. to *Apatela* is by Dyar, Journ. N. Y. Ent. Soc. March, 1898, 41.

²Dr. Dyar states that the larva of *funeralis* is a probably important exception to the classification of Prof. J. B. Smith.

- illita J. B. Sm.
 * luteicoma G. and R.
 * sperata Grote.
 * noctivaga Grote.
 emaculata J. B. Sm.
 * impressa Walker.
 fasciata Walk.
 verrilli G. and R.
 brunosa Morr.
 * distans Grote.
 barnesi J. B. Sm.
 perdita Grote.
 edolata Grote.
 * Hyliniformis Guenée.¹
 ? *longa* Guen.
 var. *pallidicoma* Grote.
 * oblongata Abbot and Smith.
 salicis Harris.
 * lanceolaria Grote.
 insolita Grote.

Gen. MEROLONCHE Grote 1883.

Typ. *M. spinea*.

- spinea* Grote.
lupini Grote.
ursina J. B. Sm.

Gen. *Apharetra* nom. nov.

Typ. *A. dentata*.

- dentata* Grote.
pyralis J. B. Sm.

—Mr. Schwarz exhibited some very dry and hard pulp of the giant cactus, taken by Mr. Hubbard in the winter of 1897, and containing specimens of the extraordinary Scolytid, *Cactopinus hubbardi* Schwarz. He had examined this pulp in January, 1898, and found the beetles alive, with no indication of oviposition. He moistened it somewhat at that time and showed the same

¹ It is a mistake to suppose that I ever determined this species as *spinigera*. For a moment I thought the form *pallidicoma* might be Guenée's *spinigera* and communicated this to Dr. Thaxter. I determined *Hyliniformis* for Prof. Riley, in the sixties, for his report. The *Hyliniformis* of my lists and collections accords with the species so named by Prof. J. B. Smith.